

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 3, 4, 11, 15, 17, 25, 28, 29, 31 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Kotlarski (WO patent 00/34090).

The patent to Kotlarski discloses the wiper blade as is claimed (figs. 6 and 8-11), including a blade rubber (22) with upper and lower grooves (34) in lateral sides thereof. Two backing plates (32) are received in the upper grooves. A holder (136) has claws (58) and is received in the lower grooves to hold the blade rubber. The holder is rotatably connected to the wiper arm (18). A resilient fin (23, 140) extends in a longitudinal direction toward each end of the blade rubber and portion (140) thereof includes claws (58) received in the lower grooves (34). A pair of support members (138), one provided at each end of the blade rubber, detachably holds the blade rubber by engaging the backing plates. The holder and support members are connected to the fins at least through the backing plates.

With respect to claim 17 and 25, the backing plate and blade rubber appear to be free to move with respect to the support members (138), at least as far as defined. Note that no glue or adhesive are employed to connect the support member with the rails.

Art Unit: 3723

With respect to claim 15, the components (140) of Kotlarski can be considered as the support members and the components (138) can be considered as part of the fin. There appears nothing to prevent such a reading. As such the components (138) include the stopper walls that engage the blade rubber.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-4, 11, 12, 14, 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller (German patent 10036122) in view of De Block (US patent 6,836,926) and Kotlarski (WO patent 00/34090).

Art Unit: 3723

The patent to Mueller discloses the invention substantially as is claimed, including a wiper blade (fig. 1a) for rotatable connection to a wiper arm via pin (13). A blade rubber (2) with secondary grooves (5) in opposed lateral sides thereof is supported by a backing plate (1) at an upper surface thereof. A holder (4) provided in the longitudinal center of the blade includes a pair of claws (fig.6) for engaging the backing plate and rubber. A pair of resilient fins (7) are connected with the holder, engage the backing plate (fig.9) and extend to and cover each end of the blade. Engagement of the fins with the holder is achieved by an engaging protrusion (9, fig.8) of the holder engaged with a hole (defined behind protrusion 8) in the fin in a direction perpendicular to the wiping surface.

The patent to Mueller discloses all of the above recited subject matter with the exception of there being two backing plates received in primary grooves in the connecting body of the blade rubber instead of a single backing plate on an upper surface and a support member that holds the blade rubber and backing plates.

The patent to De Block '926 discloses that in wiper blades, supporting structure can take the form of a single backing plate (12, fig.4) provided upon an upper surface of the blade rubber or the form of a pair of backing plates (42,44, fig.5) received within grooves in the connecting body of the blade rubber.

It would have been obvious to one of skill in the art to provide the supporting structure of the wiper blade of Mueller as a pair of backing plates in primary grooves in the connecting body instead of a single backing plate, as clearly suggested by De Block, to both reduce the amount of backing plate material needed and as an art recognized equivalent form of the supporting structure. De Block suggests that either form can be used with wiper blades. Provision of such grooves with split backing plates will define a connecting body as is claimed.

The patent to Kotlarski discloses all of the above recited subject matter.

It also would have been obvious to one of skill in the art to provide separate support members at the ends of the fins of Mueller, as clearly suggested by Kotlarski, as an art recognized equivalent arrangement of components, lacking any criticality of such arrangement. Whether the support members are separate, as taught by Kotlarski, or integrated, as taught by Mueller does not appear of patentable significance.

Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kotlarski (WO patent 00/34090) in view of Bauer et al (German patent 3,339,414).

The patent to Kotlarski discloses all of the above recited subject matter with the exception of the blade rubber including a holding portion in the form of a sloped portion in the secondary grooves for engagement with the holder to limit movement thereof and of the holder having two pairs of claws.

The patent to Bauer discloses a wiper blade (10) that includes sloped holding portions (38, fig.1,3,4,7) within the secondary grooves (35) of the blade rubber (17) for engagement with the claws (15/16, 51/16) of the holder (13) to limit longitudinal movement of the holder. Note that in the figure 7 embodiment, numerous holding portions are provided for each holder.

It would have been obvious to one of skill in the art to provide the blade of Kotlarski with either one or multiple sloped holding portions within the secondary grooves of the blade rubber for engagement with the claws of the holder, as clearly suggested by Bauer, to limit longitudinal movement of the holder with respect to the blade rubber.

Art Unit: 3723

With respect to claim 9, while Kotlarski discloses a single pair of claws that extend along the length of the holder, to modify such that there are two pair of spaced claws would have been obvious to one of skill in the art to reduce the amount of required material for the holder. Whether there is one continuous long claw or two spaced claws appear as obvious variations of one another.

Claims 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mueller (German patent 10036122) in view of De Block (US patent 6,836,926) and Kotlarski (WO patent 00/34090) as applied to claim 17 above and further in view of Breesch (German patent 10057253).

The patents to Mueller, De Block and Kotlarski disclose all of the above recited subject matter with the exception of a cover portion or holding member longitudinally extending to cover opposed lateral walls of the holder and connected between the fin sections.

The patent to Breesch discloses a cover portion (60, fig.5) that covers opposed lateral walls of the holder (36), engages with the plates (42) and is connected between the fin sections (52, figs.2,7).

It would have been obvious to one of skill in the art to provide the modified wiper blade of Kotlarski with a cover portion, as clearly suggested by Breesch, to protect the holder and provide a more attractive, aerodynamic wiper blade assembly.

With respect to claim 19, a cover portion so provided will act as a resilient holding member which at least partially overlaps with the holder and which detachably holds the blade rubber via the backing plates.

Allowable Subject Matter

Claims 10 and 13 are allowed.

Claims 18, 27 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments with respect to claims 17 and 25 have been considered but are moot in view of the new ground(s) of rejection. Applicant's argument with respect to De Block '073 using glue to fix the support members are noted and persuasive. However, as set forth above, Kotlarski does not employ glue in the connection of the support member (138 or 140) with the wiper blade and it would thus appear that they are free to move, at least as far as defined as no glue or other permanent connection of the support member to the blade is set forth.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 3723

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary K. Graham whose telephone number is 571-272-1274. The examiner can normally be reached on Tuesday to Friday (6:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph J. Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3723

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gary K Graham/
Primary Examiner, Art Unit 3723

GKG
25 November 2007